REMARKS

The drawings were objected to under 37 C.F.R. § 1.83(a) for not showing every feature of the invention. Claims 21 to 23 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. Claims 20 to 23 and 25 to 35 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20 to 23, 25, 27 and 30 to 36 were rejected under 35 U.S.C. § 102(b) as being anticipated by Turnquist et al. (U.S. Patent No. 6,105,967). Claims 26, 28 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Turnquist et al. in view of Beichl et al. (U.S. Publication No. 2004/0188943).

New claims 37 to 40 have been added. Support for new claims 37 to 40 can be found in the specification e.g. at paragraphs [0002], [0009], [0001] and [0037] and Figure 1. A new sheet of drawings (Fig. 6) is submitted for consideration. Support for Figure 6 can be found in the specification as filed e.g. paragraph [0035].

Reconsideration of the application based on the following is respectfully requested

Objections to the Drawings

The drawings were objected to under 37 C.F.R. § 1.83(a) for not showing every feature of the invention.

Applicants submit herewith one (1) sheet of new drawings (Fig. 6) depicting the separation site having an overlapping form as claimed in claim 36.

Withdrawal of the objections to the drawings under 37 C.F.R. § 1.83(a) thus is respectfully requested.

Rejections under 35 U.S.C. § 112, first paragraph

Claims 21 to 23 were rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement because the terms "closed-type" and "open-type" brush seal were found to be not enabled in the specification.

Applicants reassert that a closed-type brush seal is one in a closed ring shape, which thus needs to be inserted axially and secured with a separate fastening ring as described in [0031].

If the fastening ring is integral though, a closed ring brush seal cannot be inserted axially, and thus an open-type brush seal having a split or opening in the ring shape is used, as described in [0032]. The split or opening is used to snap the brush seal over the housing 10, the fastening ring then preventing axial movement.

Further the terms "closed-type" and "open-type" are terms that are well defined in the art pertaining to seals. In support of this position, Applicants attach as Appendix A (3) three separate product pamphlets which list open-type and closed-type seals for sale.

It is respectfully submitted that a fair reading of the specification clearly enables this distinction: that a closed-type brush seal is closed circumferentially, and open-type brush seal has at least one circumferential opening or split to permit it to snap over something.

Withdrawal of the rejections under 35 U.S.C. §112, first paragraph thus is respectfully requested.

Rejections under 35 U.S.C. § 112, second paragraph

Claims 20 to 23 and 25 to 35 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. According to the Examiner, it is unclear what is being claimed with the term "axially symmetrical components".

Applicants respectfully draw the Examiner's attention to paragraph [0004] of the specification as filed wherein the axially symmetrical components are described as being "disposed concentrically about one another." Applicants also respectfully submit that paragraph [0019] states that "[t]he axially symmetrical guide vane is disposed concentrically about axially symmetrical housing 10" as depicted in Figure 1. Similarly, paragraph [0030] states: "First sealing device 20 having an annular seal design and second sealing device 21 having a brush seal design are axially symmetrical, as are housing 10 and the guide vanes, and are positioned between these two concentrically disposed, axially symmetrical components." Applicants respectfully submit that in view of paragraphs [0004], [00019], and [0030] in conjuction with Figure 1, the term "axially symmetrical components" would be clear to one of skill in the art. Applicants reassert that as per the abstract, this merely means that in the axial direction the

components are symmetrical about an axis. The Examiner states that "[t]he Examiner is making an inquiry as to whether the applicant is trying to claim that the cross section of the two components is axially symmetrical about an axis." See Final Office Action, page 9, lines 3 to 4. Applicants note that the answer to the inquiry is yes: claim 20 explicitly states "wherein the first and second sealing devices are placed between axially symmetrical components symmetrical about an axis".

For illustration purposes only, Applicants submit Appendix B which is a mark-up copy of Fig. 1 depicting the axis ("A") and showing, as an example, that a first one of the axially symmetrical components may comprise a housing (10) of a gas turbine, and the second one of the axially symmetrical component may include a guide vane ring of the gas turbine having a plurality of vane segments (11 to 15) as recited in dependent claim 35 of the present invention. In the axial direction (perpendicular to the page in this drawing), the components (10) and (11-15) are symmetrical to the axis A.

Withdrawal of the rejections under 35 U.S.C. § 112, second paragraph thus is respectfully requested.

Rejection under 35 U.S.C. § 102(b)

Claims 20 to 23, 25, 27 and 30 to 36 were rejected under 35 U.S.C. § 102(b) as being anticipated by Turnquist et al. (US 6,105,967).

Claim 20 of the present invention recites: "A sealing arrangement, comprising: at least one first sealing device including an annular seal; a second sealing device including a brush seal; wherein the first and second sealing devices are placed between axially symmetrical components symmetrical about an axis, and the second sealing device is positioned so as to be axially offset from the first sealing device; and wherein the annular seal is a metallic piston-ring seal having a separation site.

Claim 20 recites a piston-ring seal. A piston-ring seal is an adjustable split metal ring seal. The diameter is thus flexible. See [0039] and, for example, Answers.com: "piston ring *n.* An adjustable split metal ring that fits around a piston and seals the gap between the piston and the cylinder wall" and Intota.com which defines a piston ring as "A ring-shaped device made of hard, springy material set in the piston skirt or under the piston crown." (Emphasis added)

Turnquist does not show a piston-ring seal. The backing plate 38 is fully annular and then cut into segments. See col. 4, lines 51 to col. 5, line 2. The backing plate of Turnquist is not adjustable and does not have a flexible diameter.

Moreover, Turnquist would not want a piston-ring seal as it segments its backing plate 38, as well as its seal ring 14 (See Col. 1, lines 65 et seq.).

Withdrawal of the rejections under 35 U.S.C. § 102(b) thus is respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 26, 28 and 29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Turnquist et al. in view of Beichl et al. (US 2004/0188943).

In view of the above, withdrawal of the rejections under 35 U.S.C. § 103(a) thus is respectfully requested.

New Claims 37 to 40:

New claims 37 to 40 have been added. Support for new claims 37 to 40 can be found in the specification e.g. at paragraphs at paragraphs [0002], [0009], [0001] and[0037] and Figure 1.

New claim 37 as recites in pertinent part: "A sealing arrangement for fixed, axially symmetrical components, comprising..."

Applicants respectfully submit that Turnquist does not show a sealing arrangement for fixed, axially symmetrical components as recited in claim 37 of the present invention. Rather, Turnquist describes a combined labryrinth/brush seal that is provided "in a seal between rotating and stationary components." See Turnquist abstract. Turnquist describes "a seal between the components, comprising an elongated arcuate seal ring segment carried by the stationary component and having an arcuate surface in opposition to the rotatable component, at least one labrynth seal tooth projecting generally radially from the seal ring segment surface toward the rotating surface." See Turnquist, col. 2, lines 48 to 57. Therefore, Turnquist does not show a sealing arrangement for fixed, axially symmetrical components as recited in claim 37 of the present invention.

In view of the above, applicants respectfully request that new independent claim 37, and dependent claims 38 to 40 are in condition for allowance.

CONCLUSION

The present application is respectfully submitted as being in condition for allowance and applicants respectfully request such action.

Respectfully submitted,

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